

REMARKS

Claims 1-20, 22, 24, 25, 27-29, 31-34, and 36-38 are pending. Claims 1, 7, 13-15, 22, 24, 25, 27, 31, 32, and 36 have been amended, and claims 21, 23, 26, 30, and 35 have been canceled.

Reconsideration of the application is respectfully requested for the following reasons.

I. Rejections Based on the Ito Patent.

In the Office Action, the Examiner rejected claims 1, 5, 6, 13, 15, and 19-38 under 35 USC ' 102(b) for being anticipated by the newly cited Ito patent. Applicants traverse this rejection for the following reasons.

Claim 1, as amended, recites a method for communicating information over a network, comprising (1) partitioning picture information of one block group into respective information regions, (2) forming a partition table having length information indicating a length of each of the information regions, (3) encoding a picture signal to include the partition table and the information regions, and (4) transmitting the picture signal through the network, wherein the length information in the partition table includes a plurality of bit-length numbers, each representing a number of bits allocated to a respective one of the information regions in the transmitted picture signal. The Ito patent does not disclose a method of this type.

Non-Analogous Art

The Ito patent discloses a method for storing picture data in a flash memory of a camera. (See column 1, lines 16-20, and column 2, lines 55-65). Ito does not disclose transmitting picture data or any other information over a communications network as recited in claim 1. The Ito patent therefore constitutes non-analogous art under the test set forth in MPEP ' 2141.01(a). Specifically, the Ito patent does not derive from the same field of endeavor as the claimed invention, i.e., the claimed invention pertains to transmitting information over a communications network, while Ito relates to storing information in the flash memory of a camera.

Also, the Ito patent is not reasonably pertinent to the problems which the claimed invention addresses. The Ito patent focuses on techniques for improving the compression and recording orthogonally transformed picture data in a camera memory. (See Column 1, line 65 - column 2, line 2). In contrast, the invention as presently claimed focuses on improving the transmission efficiency of picture data over a network, specifically by forming a smaller-sized picture transmission signal.

Because the Ito patent does not derive from the same field of endeavor of the claimed invention, and also is not reasonably pertinent to the problems which the claimed invention solves, the Ito patent does not constitute prior art under MPEP ' 2141.01(a). See supporting Federal Circuit precedent in *In re Clay*, 23 USPQ.2d 1058, 1060 (Fed. Cir. 1992).

Additional Differences

The Ito patent does not disclose the steps of "encoding a picture signal to include the partition table and the information regions" and then "transmitting the picture signal through the network" as recited in claim 1.

The Ito patent discloses recording compressed picture data in a memory cartridge of a digital camera. (Column 2, lines 55-65). In an effort to improve memory storage capacity, the memory cartridge (e.g., flash memory card) is divided into clusters where each cluster stores a header, packet data, a directory, and a memory allocation table (MAT) in individual locations. In the Office Action, the Examiner drew a correspondence between the MAT table and the partition table of the claimed invention. Applicants respectfully submit that no such correspondence can be tenably drawn.

The invention defined in claim 1 encodes a picture signal for transmission over a network, which picture signal includes the partition table. The Ito system, however, does not encode a picture signal for transmission over a network. Moreover, the MAT table of Ito is stored in a memory card of a camera. Accordingly, the Ito patent does not disclose the encoding and transmitting steps of the claimed invention.

Claim 1 further recites that "the length information in the partition table includes a plurality of bit-length numbers, each representing a number of bits allocated to a respective one of the information regions in the transmitted picture signal." The Ito patent also does

not disclose these features. The MAT table of Ito indicates the byte-length of each of a plurality of clusters in the camera memory cartridge. This MAT table does not store information indicating numbers of bits allocated to respective ones of information regions in a transmitted picture signal.

Because the Ito patent fails to disclose the foregoing features of claim 1, it is respectfully submitted that the Ito patent cannot anticipate this claim. Applicants further submit that these differences are sufficient to render claim 1 and its dependent claims non-obvious and thus patentable over Ito.

Dependent claim 6 recites "forming the partition table by converting a maximum length of each of the information regions into a number of bits." Because the Ito patent does not disclose a partition table of the type recited in claim 1 (i.e., a partition table having length information indicating a length of each of the information regions in a transmitted picture signal), it logically follows that Ito also does not disclose the features of claim 6 which recites how that table is formed, e.g., by converting a maximum length of each of the information regions in the transmitted picture signal into a number of bits.

Claim 13 recites a method for decoding picture signals, comprising (1) receiving a picture signal transmitted through a network, the picture signal including information regions of a block group and a partition table having length information on the information regions, (2) analyzing the partition table to determine the length of each information region,

and (3) decoding the partition regions according to the length information. The Ito patent does not disclose these features.

Specifically, Ito does not disclose receiving a picture signal "transmitted through a network" or that such a picture signal includes a "partition table." Further, Ito does not disclose a partition table having length information on information regions included in the transmitted picture signal. Instead, Ito's MAT table specifies length information for clusters in a digital camera memory card.

Without a partition table of the type recited in claim 13, it logically follows that Ito also fails to disclose analyzing and decoding steps (2) and (3) which are performed based on information stored in the partition table.

Because the Ito patent does not disclose all the features recited in claim 13, it is respectfully submitted that Ito cannot anticipate this claim. Applicant further submits that these differences are sufficient to render claim 13 and its dependent claims non-obvious and thus patentable over Ito.

Claim 15 recites a method for "communicating information over a network" by grouping picture information from a plurality of blocks into information regions, partitioning the regions, forming a partition table which includes length information for each of the regions, "encoding a picture signal to include the partition table and regions, and transmitting the picture signal through the network, wherein the length information in the partition table indicates bit-length of each of the regions in the transmitted picture signal."

The Ito patent does not disclose the above-quoted features of claim 15. Consequently, Ito does not anticipate this claim. Applicants further submit that these differences are sufficient to render claim 15 and its dependent claims non-obvious and thus patentable over Ito.

Claim 20 recites "forming the partition table by converting a maximum length of each region into a number of bits." The Ito patent does not disclose the partition table of claim 15 and therefore fails to teach or suggest these features.

Claim 22 recites that "the partition table is located at a position in front of the information regions in the picture signal." The Ito patent does not disclose the partition table of claim 15 and therefore fails to teach or suggest these features. Claim 31 discloses similar features are therefore is also distinguishable from Ito.

Claim 24 recites that "each bit-length number is different from a code used to represent information in a respective one of the information regions." The Ito patent does not disclose the partition table of claim 1, nor does it disclose that each bit-length number in the table is different from a code used to represent information in a respective one of the information regions

Claim 25 recites that each bit-length number represents a maximum number of bits allocated to a respective one of the information regions in the picture signal. The Ito patent does not disclose these features.

Claim 27 recites "decoding the picture signal based on the length information in the partition table transmitted in the picture signal." The Ito patent does not disclose including a partition table in a picture signal transmitted over a network, nor does it disclose that such a table includes information indicating a length of information regions in such a transmitted signal. Without these features, it logically follows that Ito also fails to disclose the features of claim 27.

Claim 28 recites that decoding includes "determining bit positions of each of the information regions in the picture signal based on the length information in the transmitted partition table." The Ito patent does not disclose these features.

Claim 29 recites that decoding includes "channel decoding the information regions based on the length information in the partition table transmitted in the picture signal." The Ito patent does not disclose these features, e.g., a digital camera memory does not bear any relationship to a channel and therefore does not perform channel coding of the type recited in claim 29.

Claim 32 recites that "the bit-length represents a number of bits allocated to a respective one of the regions in the picture signal." The Ito patent does not disclose these features.

Claim 33 recites that "each bit-length number is different from a code used to represent information in a respective one of the regions." The Ito patent does not disclose these features.

Claim 34 recites that "each bit-length number represents a maximum number of bits allocated to a respective one of the regions in the picture signal." The Ito patent does not disclose these features.

Claim 36 recites "decoding the picture signal based on the length information in the partition table transmitted in the picture signal." The Ito patent does not disclose these features.

Claim 37 recites that decoding includes "determining bit positions of each of the regions in the picture signal based on the length information in the transmitted partition table." The Ito patent does not disclose these features.

Claim 38 recites that decoding includes "channel decoding the regions based on the length information in the partition table transmitted in the picture signal." The Ito patent does not disclose these features.

The Examiner rejected claims 2-4, 7-12, 14, and 16-18 under 35 USC ' 103(a) for being obvious over a combination of Ito and Figures 1 and 2 of Applicants' drawings. This rejection is respectfully traversed on grounds that while Figures 1 and 2 show header, motion-vector, and DCT regions, they do not provide the features of claim 1 missing from the Ito patent. It is respectfully submitted that claims 2-4 are allowable over the cited combination for at least these reasons.

Claim 7 recites a method encoding a picture signal which is transmitted over a communications network. The picture signal includes a header region, a motion vector

region, and a discrete cosine transform coefficient region and a partition table having length information indicating lengths of the header region, the motion vector region, and discrete cosine transform coefficient region in the encoded picture signal. Claim 7 also recites transmitting the partition table with the header region, motion vector region, and discrete cosine transform coefficient region encoded picture signal over the communications network. Figures 1 and 2 do not supply these features, which are missing from the Ito patent. Accordingly, it is submitted that claim 7 and its dependent claims are allowable over the cited combination.

Claim 14 recites a method for decoding a picture signal, comprising "receiving a picture signal from a communications network, . . . analyzing the partition table to determine the length information of the information regions in the received picture signal, and . . . channel decoding the information regions according to the length information." Figures 1 and 2 do not have these features and neither does the Ito patent. Based on these differences, it is respectfully submitted that claim 14 and its dependent claims are allowable over the cited combination.

II. Rejections Based on the Nagai Patent.

The Examiner rejected claims 1-6, 13-26, and 30-35 under 35 USC ' 102(b) for being anticipated by the Nagai patent, claims 2-4, 7-12, 14, and 16-18 for being obvious under 35

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USC ' 103(a) based on an Ito-Nagai combination, and claims 7-12, 27-29, and 36-38 for being obvious under 35 USC ' 103(a) based on Nagai taken alone.

Applicants traverse these rejections based on the amendments presented in this paper and for the reasons set forth in Applicants' previous response, filed July 2004. As to the combination of Nagai and Ito, even if combined the resulting combination would fail to achieve the claimed invention for lacking a partition table included in a transmitted picture signal, as well as the information included in that table. Moreover, the Examiner's continued reliance on Nagai underscores a misunderstanding that a variable-length code included in a picture signal does not include the type of information included in the picture signal of the claimed invention, which one of ordinary skill in the art would readily recognize.

Reconsideration and withdrawal of all the rejections and objections made by the Examiner is hereby respectfully requested. In view of the foregoing amendments and remarks, it is respectfully submitted that the application is in condition for allowance. Favorable consideration and prompt allowance of the application is respectfully requested.

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To the extent necessary, Applicants petition for an extension of time under 37 CFR '1.136. Please charge any shortage in fees due in connection with this application, including extension of time fees, to Deposit Account No. 16-0607 and credit any excess fees to the same Deposit Account.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Daniel Y.J. Kim', is written over a horizontal line.

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